Exhibit 4

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Ou et al.

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(54) **METHOD AND APPARATUS FOR PRESENTING ADVERTISEMENTS**

(75) Inventors: **Canhui Ou**, Danville, CA (US); **J. Bradley Bridges**, San Antonio, TX (US); **Charles R. Kalmanek**, Short Hills, NJ (US); **Raghvendra G. Savoor**, Walnut Creek, CA (US); **Albert G. Greenberg**, Summit, NJ (US); **Stephen Sposato**, Lafayette, CA (US); **Zhi Li**, San Ramon, CA (US); **Jerold Osato**, Pinole, CA (US); **Alexandre Gerber**, Madison, NJ (US); **Oliver Spatscheck**, Randolph, NJ (US); **Sun-Uk Park**, Union City, CA (US)

(73) Assignee: **AT&T Intellectual Property I, L.P.**, Atlanta, GA (US)

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G06Q 30/02 (2012.01)

(52) **U.S. Cl.**
CPC ***G06Q 30/0269*** (2013.01); ***G06Q 30/02*** (2013.01); ***G06Q 30/0246*** (2013.01); ***G06Q 30/0255*** (2013.01); ***G06Q 30/0256*** (2013.01); ***G06Q 30/0258*** (2013.01); ***G06Q 30/0273*** (2013.01); ***G06Q 30/0277*** (2013.01)

(58) **Field of Classification Search**
CPC G06Q 30/0269
USPC 705/14
See application file for complete search history.

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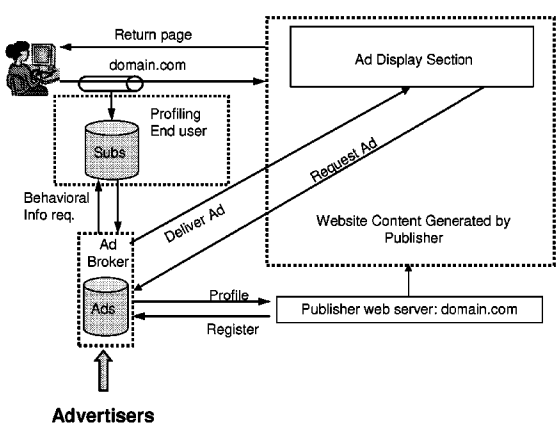
Primary Examiner — Daniel M Sorkowitz
(74) *Attorney, Agent, or Firm* — Guntin & Gust, PLC; Ralph Trementozzi

(57) **ABSTRACT**

A method and apparatus for presenting advertisements is disclosed. An apparatus that incorporates teachings of the present disclosure may include, for example, a system having an inspection element that monitors packet traffic associated with an end user, and determines a behavioral profile of the end user from the monitored packet traffic, a publisher element that detects an end user visiting a website managed thereby, and generates an advertisement request associated with the website, and advertisement element that selects one or more advertisements according to the behavioral profile of the end user, and submits said one or more advertisements to the publisher element for presentation thereof to the end user. Additional embodiments are disclosed.

22 Claims, 4 Drawing Sheets



300

EXHIBIT 8

(56) **References Cited**

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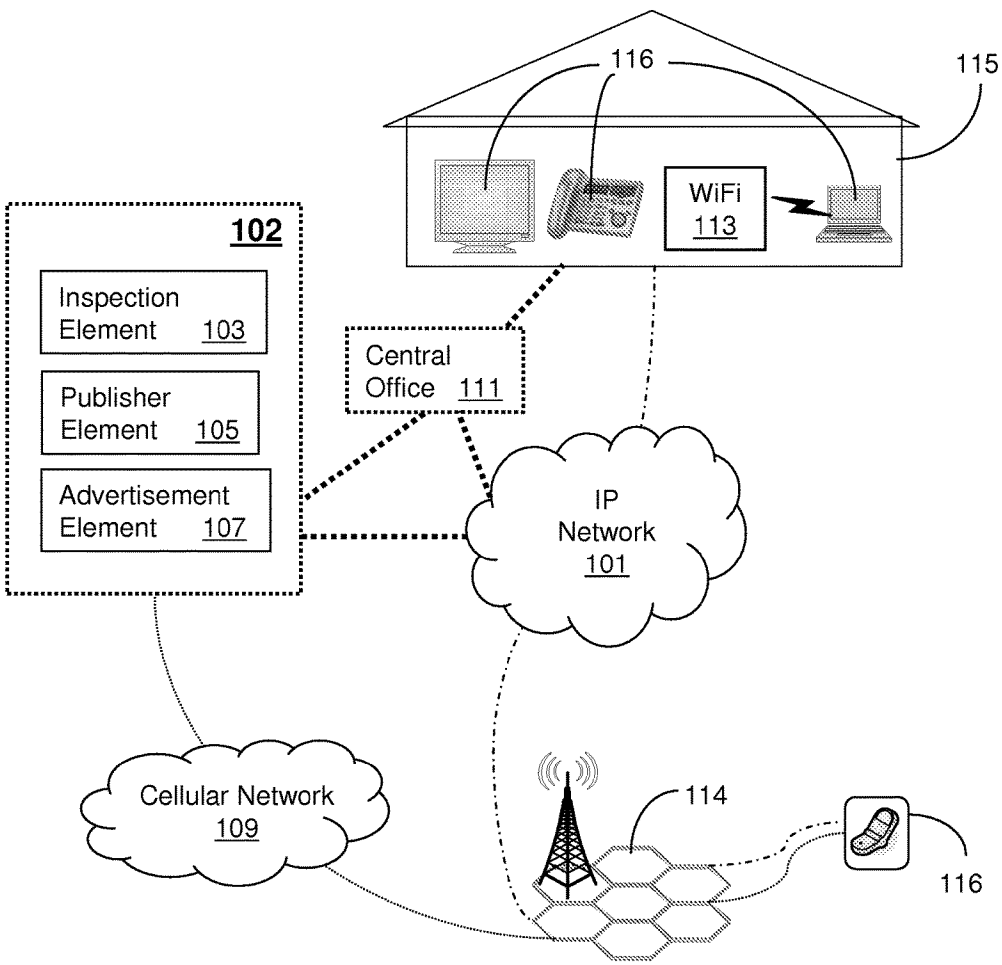

116
115
WiFi
113
102
Inspection
Element 103
Publisher
Element 105
Advertisement
Element 107
Central
Office 111
IP
Network
101
Cellular Network
109
114
116

100

FIG. 1

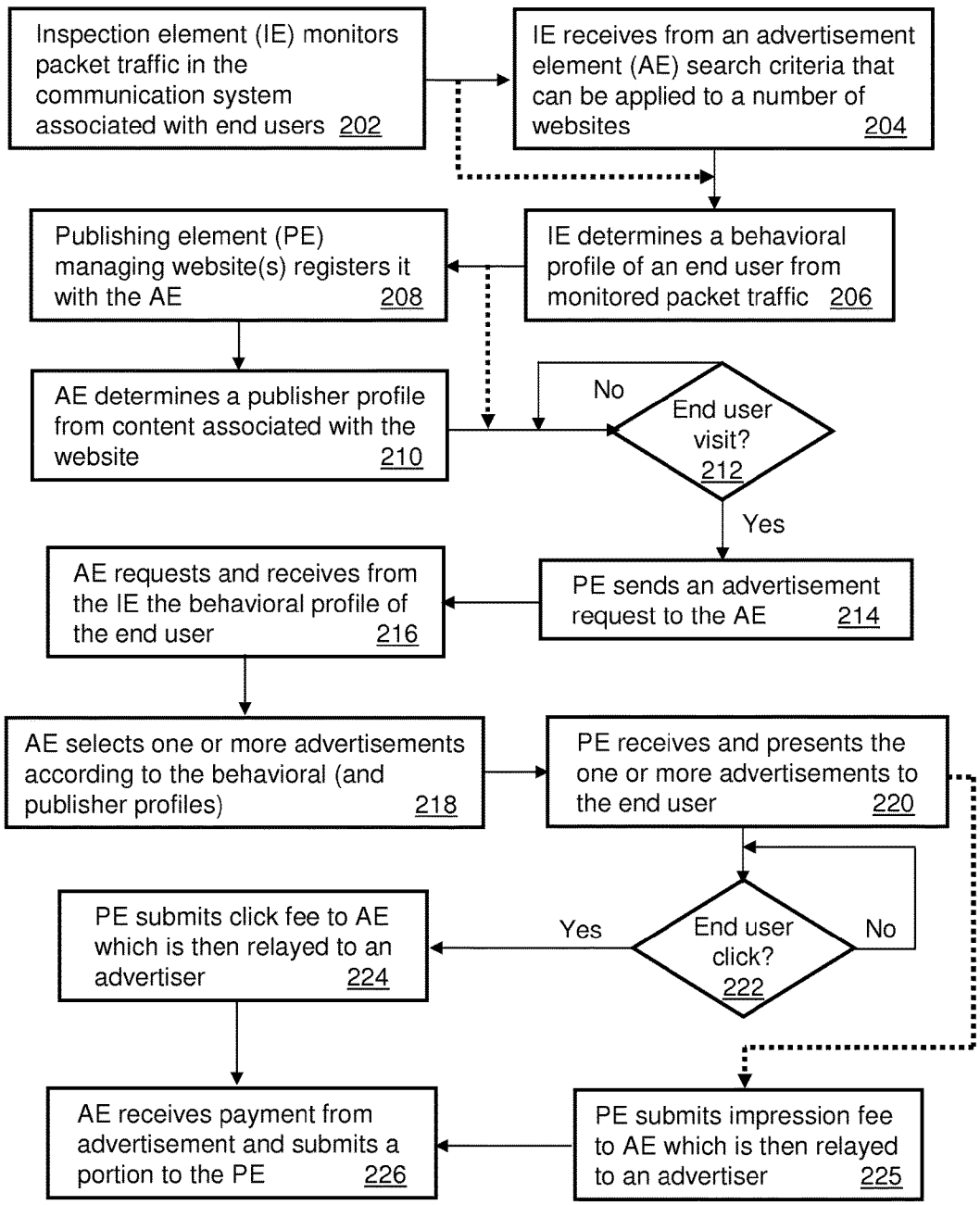
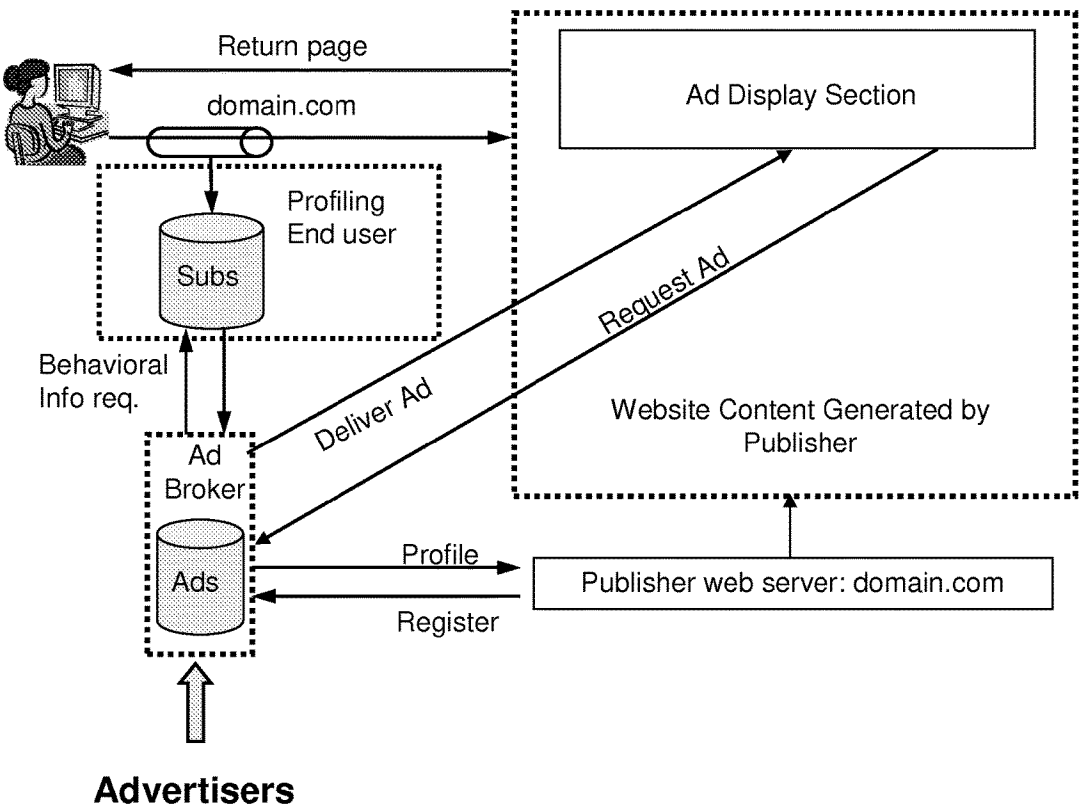

Inspection element (IE) monitors packet traffic in the communication system associated with end users 202
IE receives from an advertisement element (AE) search criteria that can be applied to a number of websites 204
Publishing element (PE) managing website(s) registers it with the AE 208
IE determines a behavioral profile of an end user from monitored packet traffic 206
AE determines a publisher profile from content associated with the website 210
No
End user visit? 212
Yes
AE requests and receives from the IE the behavioral profile of the end user 216
PE sends an advertisement request to the AE 214
AE selects one or more advertisements according to the behavioral (and publisher profiles) 218
PE receives and presents the one or more advertisements to the end user 220
PE submits click fee to AE which is then relayed to an advertiser 224
Yes
End user click? 222
No
AE receives payment from advertisement and submits a portion to the PE 226
PE submits impression fee to AE which is then relayed to an advertiser 225

FIG. 2 200


Return page
domain.com
Ad Display Section
Profiling
End user
Subs
Request Ad
Behavioral
Info req.
Deliver Ad
Website Content Generated by
Publisher
Ad
Broker
Ads
Profile
Register
Publisher web server: domain.com
Advertisers

300

FIG. 3

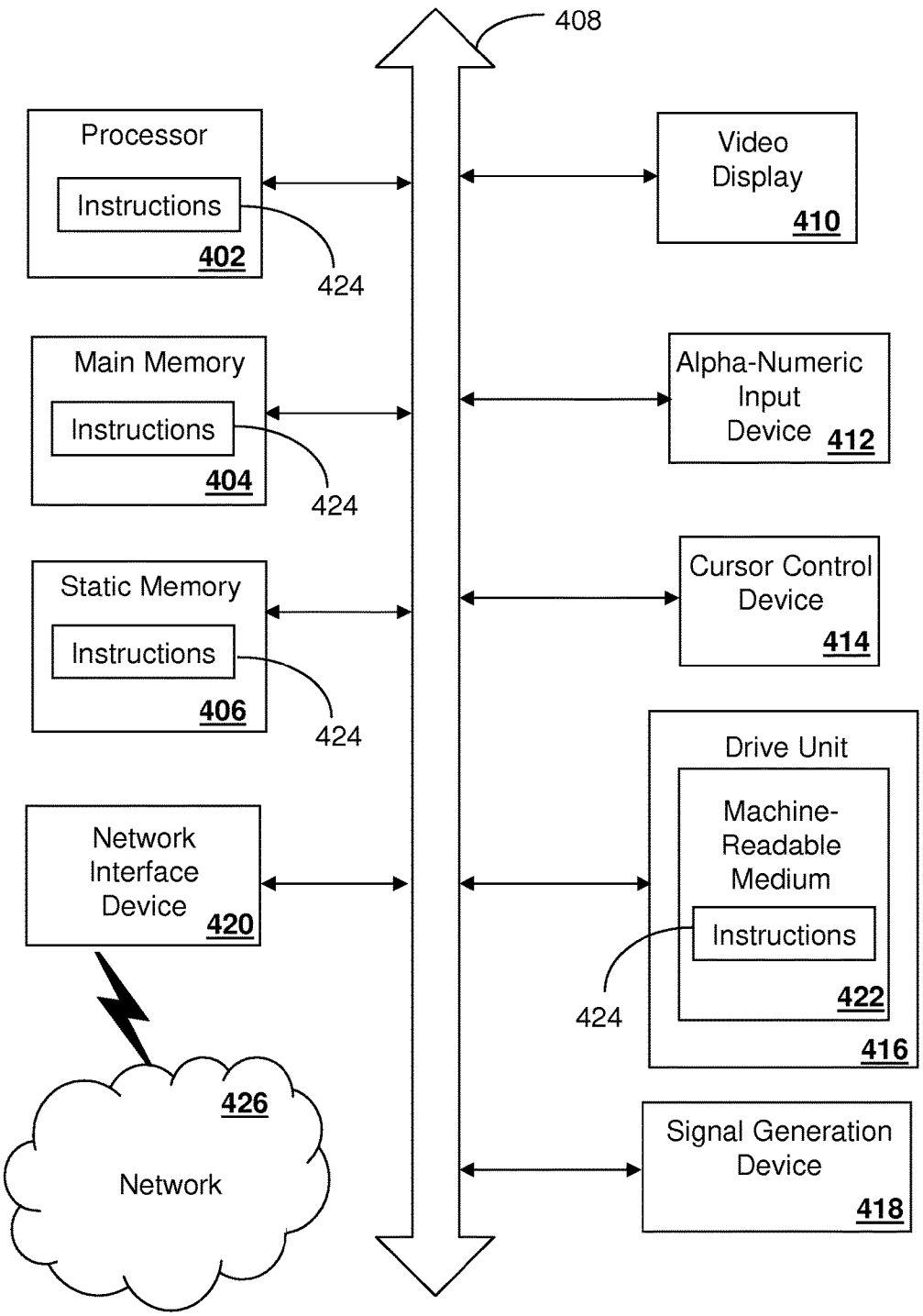

408
Processor
Instructions
402
424
Main Memory
Instructions
404
424
Static Memory
Instructions
406
424
Network Interface Device
420
426
Network
Video Display
410
Alpha-Numeric Input Device
412
Cursor Control Device
414
Drive Unit
Machine-Readable Medium
Instructions
422
424
416
Signal Generation Device
418

FIG. 4 400

METHOD AND APPARATUS FOR PRESENTING ADVERTISEMENTS

FIELD OF THE DISCLOSURE

The present disclosure relates generally to communication services and more specifically to a method and apparatus for presenting advertisements.

BACKGROUND

Online advertising has evolved from the early non-contextual pay-per-impression model to the currently predominant contextual pay-per-click model. In non-contextual pay-per-impression model, ads are placed on publishers' websites with little or no regard to visitors' interest. Payment from advertisers to ad brokers and from ad brokers to publishers are typically tied to the number of times a particular ad is displayed to visitors, hence the name pay per impression.

This model has in large part been replaced by the contextual pay-per-click model so that payment of an ad is directly tied into its performance. Advertisers only pay for the clicks (or number of times an ad was clicked by users), not the impressions or number of times an ad was displayed. Thus, in contextual pay-per-click online advertising models, the success of an ad is measured by its click-thru rate, which is defined as the number of times the ad is clicked by any user over the number of times the ad was displayed. Consequently, the more targeted the content, the higher the click-thru rate, and the more revenue for ad brokers and website publishers.

Typically, ad brokers profile subscribers via cookies. Cookies from an ad broker only track end user clicks on the ads provided by the ad broker. An ad broker has no visibility to websites which an end user visits. As a result, an ad broker's ability to profile an end user is limited.

Accordingly, a need arises for a method and apparatus for presenting advertisements.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** depicts an exemplary embodiment of a communication system;

FIG. **2** depicts an exemplary method operating in the communication system;

FIG. **3** depicts an exemplary block diagram of the operations depicted by the method of FIG. **2**; and

FIG. **4** depicts an exemplary diagrammatic representation of a machine in the form of a computer system within which a set of instructions, when executed, may cause the machine to perform any one or more of the methodologies disclosed herein.

DETAILED DESCRIPTION

Embodiments in accordance with the present disclosure provide a method and apparatus for presenting advertisements.

In a first embodiment of the present disclosure, a computer-readable storage medium can have computer instructions for monitoring packet traffic associated with an end user, determining a behavioral profile of the end user from the monitored packet traffic, and submitting to an advertisement element the behavioral profile.

In a second embodiment of the present disclosure, a computer-readable storage medium can have computer instructions for receiving an advertisement request from a publisher element in response to an end user visiting a website operated by the publisher element, receiving from an Internet Service Provider (ISP) a behavioral profile of the end user, selecting one or more advertisements according to the behavioral profile of the end user, and submitting the one or more advertisements to the web server.

In a third embodiment of the present disclosure, a computer-readable storage medium can have computer instructions for detecting an end user visit to a website, submitting an advertisement request associated with the website to an advertisement element, and receiving from the advertisement element one or more advertisements selected according to a behavioral profile of the end user supplied by an Internet Service Provider (ISP).

In a fourth embodiment of the present disclosure, a system can have an inspection element that monitors packet traffic associated with an end user, and determines a behavioral profile of the end user from the monitored packet traffic, a publisher element that detects an end user visiting a website managed thereby, and generates an advertisement request associated with the website, and an advertisement element that selects one or more advertisements according to the behavioral profile of the end user, and submits said one or more advertisements to the publisher element for presentation thereof to the end user.

In a fifth embodiment of the present disclosure, a method can have the step of submitting a payment in response to receiving a billing request for one or more advertisements presented by a publisher according to a behavioral profile associated with an end user supplied by an Internet Service Provider (ISP).

FIG. **1** depicts an exemplary embodiment of a communication system **100**. The communication system **100** can comprise a number of wired and wireless access points (WAPs). In the case of wireline communications, the WAP can represent a central office **111** coupled to a building **115** by way of a distribution hub such as a service area interface (SAI) not shown in FIG. **1**. The central office **111** can provide traditional circuit switched services to a plain old telephone service (POTS) terminal. An IP network **101** managed by an Internet Service Provider (ISP) supporting packetized voice, video, and data directed to messaging devices **116** such as an IPTV terminal, a Voice over IP (VoIP) terminal, and/or a computer communicating over for example a WiFi **113** or xDSL interface. Alternatively, such services can be an integral part of the services provided by the central office **111**.

For wireless communications, a WAP can represent a plurality of wireless base stations **114** operating according to a frequency reuse architecture that provides over-the-air coverage to a large geographic region of roaming messaging devices **116**.

Some of the messaging devices **116** can operate as multimode devices

Accordingly, said roaming devices can utilize POTS or VoIP services when in the building **115**, or cellular services outside the building **115**. A cellular network **109** can utilize circuit-switched technology for voice and data services such as GSM-GPRS, EDGE, CDMA-1X, EV/DO, UMTS, and other known and next generation cellular communications technologies.

Alternatively, or in combination, other wireless access technologies can be applied to the present disclosure such as Worldwide Interoperability for Microwave Access (WiMAX), ultra wide band (UWB), Bluetooth™, and software defined radio (SDR). SDR provides a means to access public

and private communication spectrum with any number of communication protocols that can be dynamically downloaded over-the-air to the messaging devices **116**. Other present and future generation wireless access technologies can also be applied to the present disclosure.

The communication system **100** can further comprise an inspection element **103**, a publisher element **105**, and an advertisement element **107**. The inspection element **103** can represent hardware and/or software managed by for example an ISP that monitors packet traffic associated with messaging devices **116** of an end user. The publisher element **105** can represent a web server operated by a publisher that publishes content and advertisements by way of a website accessible to Internet users. The advertisement element **107** can represent hardware and/or software operated by an ad broker for supplying to the publisher element **105** advertisements which can be selected according to behavioral and/or content profiles derived from the inspection and publisher elements **103**, **105** as will be described shortly. Once advertisements have been selected and forwarded to the publisher element **105**, the publisher element **105** presents a web page to end users with the publisher's content and targeted advertisements. Advertisements can represent objects presented singly or combination as audible, still or moving images. It would be appreciated by one of ordinary skill in the art that the inspection, publisher, and advertisement elements **103**, **105**, **107** can operate singly or in any combination such as system **102**.

FIG. **2** depicts an exemplary method **200** operating in portions of the communication system **100**. Method **200** begins with step **202** in which the inspection element **103** monitors packet traffic in the communication system **100** for an end user. The inspection element **103** can utilize common inspection technology such as deep packet inspection (DPI) which can analyze packet traffic from any layer in an Open Systems Interconnection (OSI) model such as packet headers and payloads to assess the behavior of a target end user utilizing common market analysis tools. Alternatively, DPI can be applied to a Transmission Control Protocol/Internet Protocol (TCP/IP) applied to the packet traffic. Thus for each of its subscribers, the ISP can perform various levels of DPI analysis to determine a demographic and/or psychographic end user profile on the product and service interests of its subscriber base. With this information, the inspection element **103** can generate in step **206** a behavioral profile of each end user of the ISP.

In a supplemental embodiment, the inspection element **103** can receive in step **204** from the advertisement element **107**, search criteria that can be applied to a number of websites. The search criteria can include a number of search terms (e.g., for cars, boats, clothing, accessories, computers, electronics, office supplies, home supplies, travel, etc.) which can be accompanied with search guidelines (e.g., if the end user visits a website related to cars, inspect the following keywords in the user's packets). Thus steps **202**-**204** can be combined as another means to perform market analysis on packet traffic and thereby generate a behavioral profile in step **206** for each end user of the ISP.

In step **208** the publisher element **105** can register one or more websites managed thereby with the advertisement element **107**. In this step, the advertisement element **105** can be programmed to determine a publisher profile for each website by inspecting the content published thereby and determining from said content marketing patterns that identify ads having a high likelihood of targeting end user interests associated with said content. Thus with a publisher profile, and behavioral profiles for targeted end users, the advertisement element **105** can target subscribers of the ISP more precisely than prior art systems. In an alternative embodiment, steps **206** and **208** can be reversed in order. That is, the order of determining a publisher profile and a behavioral profile has no effect on the present disclosure. In yet another alternative embodiment, the inspection element **103** can proceed from step **206** to step **212** bypassing the need for determining a publisher profile. In this embodiment, the behavioral profile of each end user would be utilized alone to target ISP subscribers.

With the behavioral profile and publisher profile (if available), the publisher element **105** can be programmed in step **212** to check for end user visits to a website managed thereby. When an end user visit is detected, the publisher element **105** proceeds to step **214** where it submits an advertisement request to the advertisement element **107**. The advertisement request can include a number of operational parameters such as an identity of the end user visiting the website (e.g., an IP address associated therewith), a script (e.g., a Java script), and/or physical and software constraints for presenting advertisements at a designated location in a web page of the website visited by the end user. The advertisement element **107** in step **216** requests from the inspection element **103** the behavioral profile of the end user visiting the website.

Once it is received, the advertisement element proceeds to step **218** where it selects one or more advertisements according to the behavioral profile (and the publisher profile if available). In step **220**, the publisher element **105** receives and presents the one or more advertisements to the end user. The presentation of advertisements can be audio only, visual only, still or moving images, or combinations thereof. Once the advertisements are presented, the publisher element **105** can be programmed to track end user selections ("clicks") of said advertisements. If no clicks are detected, the publisher element **105** can be programmed not to submit fees for advertisements.

If on the other hand one or more advertisement selections are detected, the publishing element **105** proceeds to step **224** where it submits fee per click to the advertisement element **107**, which relays said fee to a corresponding advertiser (a pay per click business model). Alternatively, step **224** can be modified so that click fees are accumulated over periodic payment intervals (e.g., month-to-month) and submitted to the advertisement element **107** and thereafter to the advertiser over said intervals. Upon receiving a payment from the advertiser, the advertisement element **107** in step **226** keeps a portion of the payment for fulfilling its brokerage services and submits the remainder to the publisher element **105**. In an alternative embodiment, the publisher element **105** can be programmed to proceed from step **220** to step **225** where it submits an impression fee to the advertisement element which relays said fee to the advertiser (a pay per impression business model). Upon receiving payment, the advertisement element **107** performs revenue sharing as described in step **226**. FIG. **3** depicts an exemplary block diagram of the operations depicted by the method **200**.

It would be evident to an artisan with ordinary skill in the art that the aforementioned embodiments can be modified, reduced, or enhanced without departing from the scope and spirit of the claims described below. For example, method **200** can be applied in the context of an end user visiting a website from a cell phone or personal digital assistant rather than a computer. The advertisement model described above can be applied as a push rather than a pull business model. For instance, the advertisement element **107** can proactively

submit an advertisement to the end user's messaging device **116** prior to the end user visiting a website based on its analysis of the behavioral profile supplied by the inspection element. Moreover, the order and timing of steps **202-225** can be modified without substantially changing the essence of the present disclosure

These are but a few examples of other embodiments that can be read into the claims. Accordingly, the reader is directed to the claims below for a fuller understanding of the breadth and scope of the present disclosure.

FIG. **4** depicts an exemplary diagrammatic representation of a machine in the form of a computer system **400** within which a set of instructions, when executed, may cause the machine to perform any one or more of the methodologies discussed above. In some embodiments, the machine operates as a standalone device. In some embodiments, the machine may be connected (e.g., using a network) to other machines. In a networked deployment, the machine may operate in the capacity of a server or a client user machine in server-client user network environment, or as a peer machine in a peer-to-peer (or distributed) network environment.

The machine may comprise a server computer, a client user computer, a personal computer (PC), a tablet PC, a laptop computer, a desktop computer, a control system, a network router, switch or bridge, or any machine capable of executing a set of instructions (sequential or otherwise) that specify actions to be taken by that machine. It will be understood that a device of the present disclosure includes broadly any electronic device that provides voice, video or data communication. Further, while a single machine is illustrated, the term "machine" shall also be taken to include any collection of machines that individually or jointly execute a set (or multiple sets) of instructions to perform any one or more of the methodologies discussed herein.

The computer system **400** may include a processor **402** (e.g., a central processing unit (CPU), a graphics processing unit (GPU, or both), a main memory **404** and a static memory **406**, which communicate with each other via a bus **408**. The computer system **400** may further include a video display unit **410** (e.g., a liquid crystal display (LCD), a flat panel, a solid state display, or a cathode ray tube (CRT)). The computer system **400** may include an input device **412** (e.g., a keyboard), a cursor control device **414** (e.g., a mouse), a disk drive unit **416**, a signal generation device **418** (e.g., a speaker or remote control) and a network interface device **420**.

The disk drive unit **416** may include a machine-readable medium **422** on which is stored one or more sets of instructions (e.g., software **424**) embodying any one or more of the methodologies or functions described herein, including those methods illustrated above. The instructions **424** may also reside, completely or at least partially, within the main memory **404**, the static memory **406**, and/or within the processor **402** during execution thereof by the computer system **400**. The main memory **404** and the processor **402** also may constitute machine-readable media.

Dedicated hardware implementations including, but not limited to, application specific integrated circuits, programmable logic arrays and other hardware devices can likewise be constructed to implement the methods described herein. Applications that may include the apparatus and systems of various embodiments broadly include a variety of electronic and computer systems. Some embodiments implement functions in two or more specific interconnected hardware modules or devices with related control and data signals communicated between and through the modules, or as portions of an application-specific integrated circuit. Thus, the example system is applicable to software, firmware, and hardware implementations.

In accordance with various embodiments of the present disclosure, the methods described herein are intended for operation as software programs running on a computer processor. Furthermore, software implementations can include, but not limited to, distributed processing or component/object distributed processing, parallel processing, or virtual machine processing can also be constructed to implement the methods described herein.

The present disclosure contemplates a machine readable medium containing instructions **424**, or that which receives and executes instructions **424** from a propagated signal so that a device connected to a network environment **426** can send or receive voice, video or data, and to communicate over the network **426** using the instructions **424**. The instructions **424** may further be transmitted or received over a network **426** via the network interface device **420**.

While the machine-readable medium **422** is shown in an example embodiment to be a single medium, the term "machine-readable medium" should be taken to include a single medium or multiple media (e.g., a centralized or distributed database, and/or associated caches and servers) that store the one or more sets of instructions. The term "machine-readable medium" shall also be taken to include any medium that is capable of storing, encoding or carrying a set of instructions for execution by the machine and that cause the machine to perform any one or more of the methodologies of the present disclosure.

The term "machine-readable medium" shall accordingly be taken to include, but not be limited to: solid-state memories such as a memory card or other package that houses one or more read-only (non-volatile) memories, random access memories, or other re-writable (volatile) memories; magneto-optical or optical medium such as a disk or tape; or other self-contained information archive or set of archives is considered a distribution medium equivalent to a tangible storage medium. Accordingly, the disclosure is considered to include any one or more of a machine-readable medium or a distribution medium, as listed herein and including art-recognized equivalents and successor media, in which the software implementations herein are stored.

Although the present specification describes components and functions implemented in the embodiments with reference to particular standards and protocols, the disclosure is not limited to such standards and protocols. Each of the standards for Internet and other packet switched network transmission (e.g., TCP/IP, UDP/IP, HTML, HTTP) represent examples of the state of the art. Such standards are periodically superseded by faster or more efficient equivalents having essentially the same functions. Accordingly, replacement standards and protocols having the same functions are considered equivalents.

The illustrations of embodiments described herein are intended to provide a general understanding of the structure of various embodiments, and they are not intended to serve as a complete description of all the elements and features of apparatus and systems that might make use of the structures described herein. Many other embodiments will be apparent to those of skill in the art upon reviewing the above description. Other embodiments may be utilized and derived therefrom, such that structural and logical substitutions and changes may be made without departing from the scope of this disclosure. Figures are also merely representational and may not be drawn to scale. Certain proportions thereof may be exaggerated, while others may be minimized. Accord-

ingly, the specification and drawings are to be regarded in an illustrative rather than a restrictive sense.

Such embodiments of the inventive subject matter may be referred to herein, individually and/or collectively, by the term "invention" merely for convenience and without intending to voluntarily limit the scope of this application to any single invention or inventive concept if more than one is in fact disclosed. Thus, although specific embodiments have been illustrated and described herein, it should be appreciated that any arrangement calculated to achieve the same purpose may be substituted for the specific embodiments shown. This disclosure is intended to cover any and all adaptations or variations of various embodiments. Combinations of the above embodiments, and other embodiments not specifically described herein, will be apparent to those of skill in the art upon reviewing the above description.

The Abstract of the Disclosure is provided to comply with 37 C.F.R. § 1.72(b), requiring an abstract that will allow the reader to quickly ascertain the nature of the technical disclosure. It is submitted with the understanding that it will not be used to interpret or limit the scope or meaning of the claims. In addition, in the foregoing Detailed Description, it can be seen that various features are grouped together in a single embodiment for the purpose of streamlining the disclosure. This method of disclosure is not to be interpreted as reflecting an intention that the claimed embodiments require more features than are expressly recited in each claim. Rather, as the following claims reflect, inventive subject matter lies in less than all features of a single disclosed embodiment. Thus the following claims are hereby incorporated into the Detailed Description, with each claim standing on its own as a separately claimed subject matter.

What is claimed is:

1. A non-transitory computer-readable storage device, comprising computer instructions which, responsive to being executed by a processor, cause the processor to perform operations comprising:

receiving, at an advertisement device, an advertisement request via Internet from a publisher device in response to an end user device of an end user utilizing communication services of an internet service provider system, the communication services including access via the Internet to a website operated by the publisher device, the advertisement request being generated by the publisher device based on a detection by the publisher device of the end user device visiting the website, wherein the advertisement request includes presentation constraints associated with a presentation of website advertising by the end user device at a designated location in a web page of the website, the presentation constraints being associated with hardware of the end user device, and wherein the advertisement device is operated by a first entity that is different from a second entity operating the publisher device;

submitting, via the Internet by the advertisement device, search criteria to the internet service provider system, wherein the search criteria includes search terms and associated search guidelines that are based on content of the website operated by the publisher device;

receiving, via the Internet from the internet service provider system, a behavioral profile of the end user, wherein the behavioral profile is received at the advertisement device, wherein the internet service provider system is in communication with the publisher device over the Internet, wherein the advertisement device operated by the first entity is different from a third entity providing the communication services via the internet service provider system, and wherein the behavioral profile of the end user is determined by the internet service provider system according to monitoring, by the internet service provider system, of packet traffic associated with the end user according to the search terms and the associated search guidelines, and wherein the internet service provider system operated by the third entity sends the behavioral profile of the end user to the advertisement device operated by the first entity, wherein the packet traffic of a plurality of user devices associated with the end user is monitored by an inspection element of the internet service provider system by analyzing packet headers of the packet traffic via a packet switched network transmission protocol that is applied to the packet traffic during data communications between hardware devices of the internet service provider system;

selecting, by the advertisement device, advertisement information according to the behavioral profile of the end user and the presentation constraints; and

submitting, via the Internet by the advertisement device, the advertisement information to the publisher device to cause the publisher device to generate and integrate an advertisement into the website according to the advertising information and the presentation constraints.

2. The non-transitory computer-readable storage device of claim **1**, wherein the operations further comprise determining a publisher profile from content associated with the website, wherein the advertisement information is selected according to the behavioral profile of the end user and the publisher profile, and wherein the processor comprises a plurality of processors operating in a distributed processing environment.

3. The non-transitory computer-readable storage device of claim **2**, wherein the publisher device and the advertisement device are separate devices in communication with each other, and wherein the operations further comprise:

receiving a registration request from the publisher device; and

determining the publisher profile in response to the registration request.

4. The non-transitory computer-readable storage device of claim **1**, wherein the behavioral profile comprises a demographic profile from market analysis tools analyzing data from the end user device.

5. The non-transitory computer-readable storage device of claim **1**, wherein the behavioral profile comprises a psychographic profile from market analysis tools analyzing data from the end user device.

6. The computer-readable storage device of claim **1**, wherein the operations further comprise submitting search criteria to the internet service provider system to assist the internet service provider system in determining the behavioral profile of the end user.

7. The non-transitory computer-readable storage device of claim **6**, wherein the search criteria comprises search terms with associated search guidelines that are based on content subject matter.

8. The non-transitory computer-readable storage device of claim **1**, wherein the advertisement request includes identification information associated with the end user device and includes a script, wherein the advertisement request comprises an operational parameter associated with the website,

and wherein the operations further comprise tailoring the advertisement information according to the operational parameter.

9. The non-transitory computer-readable storage device of claim **1**, wherein the operations further comprise submitting a charge to the advertisement device for submitting the advertisement information to the publisher device.

10. The non-transitory computer-readable storage device of claim **1**, comprising computer instructions for:

receiving a notice from the publisher device for a selection of the advertisement;

submitting a charge to an advertiser associated with the advertisement;

receiving a payment from the advertiser in response to the charge submitted; and

submitting a portion of the payment to the publisher device.

11. A non-transitory computer-readable storage device comprising computer instructions which, responsive to being executed by a publisher device, cause the publisher device to perform operations comprising:

maintaining a website;

detecting an end user device visiting the website, the end user device being associated with an end user;

generating and submitting an advertisement request associated with the website to an advertisement device via Internet, wherein the generating and submitting of the advertisement request is responsive to the detecting of the end user device visiting the website, wherein the advertisement request comprises presentation constraints, wherein the presentation constraints are associated with the end user device, and wherein the presentation constraints are associated with a presentation of website advertising at a designated location in a web page of the website; and

receiving, via the Internet from the advertisement device, an advertisement selected according to a behavioral profile of the end user supplied via the Internet by an internet service provider system and according to the presentation constraints, wherein the publisher device is in communication with the internet service provider system over the Internet, wherein the advertisement device is operated by a first entity that is different from a second entity operating the internet service provider system, wherein the advertisement device operated by the first entity is different from a third entity operating the publisher device, wherein the advertisement device provides search criteria to the internet service provider system, wherein the search criteria includes search terms and associated search guidelines that are based on content of the website, wherein the behavioral profile of the end user is determined by the internet service provider system according to monitoring, by the internet service provider system, of packet traffic associated with the end user according to the search terms and the associated search guidelines, wherein the packet traffic of a plurality of user devices associated with the end user is monitored by an inspection element of the internet service provider system by analyzing packet headers of the packet traffic via a packet switched network transmission protocol that is applied to the packet traffic during data communications between hardware devices of the internet service provider system, and wherein the internet service provider system operated by the third entity sends the behavioral profile of the end user to the advertisement device operated by the first entity, wherein packet payloads are not analyzed by the inspection element.

12. The non-transitory computer-readable storage device of claim **11**, wherein the operations further comprise:

presenting the advertisement to the end user device by integrating the advertisement into the website according to the presentation constraints;

monitoring user interaction of the end user device with the advertisement;

determining user interaction fees over a predetermined time period based on the user interaction and interaction of other end user devices with the advertisement;

submitting a request for payment to the advertisement device based on the user interaction fees; and

receiving payment from the advertisement device in response to the request for payment and according to a revenue sharing agreement.

13. The non-transitory computer-readable storage device of claim **11**, wherein the advertisement device determines a publisher profile from content associated with the website, and wherein the advertisement is selected according to the behavioral profile of the end user and the publisher profile.

14. The non-transitory computer-readable storage device of claim **11**, wherein the behavioral profile comprises a demographic profile and a psychographic profile.

15. The non-transitory computer-readable storage device of claim **11**, wherein the internet service provider system receives search criteria from the advertisement device to assist the internet service provider system in determining the behavioral profile of the end user, wherein the search criteria comprises search terms with associated search guidelines, and wherein the search guidelines are selected from a group of search guidelines according to a subject matter of visited websites.

16. The non-transitory computer-readable storage device of claim **11**, wherein the submitting of the advertisement request to the advertisement device causes the advertisement device to request the behavioral profile from the internet service provider system.

17. The non-transitory computer-readable storage device of claim **11**, wherein the operations further comprise submitting a fee to the advertisement device in response to the end user selecting the advertisement.

18. The non-transitory computer-readable storage device of claim **11**, wherein the operations further comprise submitting a charge to the advertisement device for the advertisement.

19. The non-transitory computer-readable storage device of claim **11**, wherein the operations further comprise:

submitting a notice to the advertisement device in response to a selection of the advertisement; and

receiving a payment from the advertisement device in response to the notice.

20. A non-transitory computer-readable storage device comprising computer instructions which, responsive to being executed by a publisher device, cause the publisher device to perform operations comprising:

receiving, via Internet from an advertisement server, search criteria to the internet service provider system, wherein the search criteria includes search terms and associated search guidelines that are based on content of a website operated by a publisher server;

monitoring packet traffic associated with a plurality of end user devices associated with an end user according to the search terms and the associated search guidelines, the packet traffic being from a network element of the internet service provider system that provides commu-

nication services to the end user device, wherein the packet traffic of the plurality of user devices associated with the end user is monitored by the inspection element of the internet service provider system by analyzing packet headers of the packet traffic via a packet switched network transmission protocol that is applied to the packet traffic during data communications between hardware devices of the internet service provider system;

determining a behavioral profile of an end user of the end user device based on the packet traffic; and

in response to a profile request, sending, via the inspection element of the internet service provider system, the behavioral profile of the end user of the end user device via the Internet to the advertisement server that selects advertisement information according to the behavioral profile of the end user and according to presentation constraints, wherein the profile request is generated by the advertisement server responsive to an advertisement request provided by a publisher server based on detection by the publisher server of the end user device visiting a website of the publisher server, wherein the advertisement information is used by the publisher server for generating an advertisement and integrating the advertisement into the website, wherein the publisher server is in communication with the internet service provider system over the Internet and wherein the advertisement server is operated by a first entity that is different from a second entity that is providing the communication services via the internet service provider system, wherein the advertisement server operated by the first entity is different from a second entity that is operating the publisher server, wherein the presentation constraints are associated with the end user device, and wherein the presentation constraints are associated with a presentation of website advertising at a designated location in a web page of the website.

21. The non-transitory computer-readable storage device of claim **20**, wherein the inspection element receives search criteria from the advertisement server, the search criteria for the monitoring of the packet traffic, wherein the search criteria comprises search terms with associated search guidelines, and wherein the inspection element comprises a plurality of processors operating in a distributed processing environment.

22. A method, comprising:

receiving, at an advertiser server, an advertisement request via Internet from a publisher server in response to an end user device associated with an end user visiting a website operated by the publisher server, the advertisement request being generated by the publisher server based on detection by the publisher server of the end user device visiting the website, the advertisement request including presentation constraints associated with a presentation of website advertising by the end user device at a designated location in a web page of the website, the presentation constraints being associated with hardware of the end user device;

submitting, via the Internet by the advertisement server, search criteria to an internet service provider system, wherein the search criteria includes search terms and associated search guidelines that are based on content of the website operated by the publisher server;

selecting, by the advertiser server, advertisement information according to the presentation constraints and according to a behavioral profile associated with the end user device, wherein an internet service provider system sends the behavioral profile associated with the end user device to the advertising server via the Internet; and

submitting, from the advertiser server via the Internet, a payment to a system in response to receiving a billing request over the internet for an advertisement associated with the advertisement request presented by the publisher server according to the advertisement information, the behavioral profile and the presentation constraints, wherein the publisher server is in communication with the internet service provider system via the Internet, wherein the advertiser server is operated by a first entity that is different from a second entity operating the internet service provider system, wherein the advertiser server operated by the first entity is different from a third entity operating the publisher server, and wherein the behavioral profile associated with the end user is determined by the internet service provider system according to monitoring, by the internet service provider system, of packet traffic associated with the end user device according to the search terms and the associated search guidelines, wherein the packet traffic of a plurality of user devices associated with the end user is monitored by an inspection element of the internet service provider system by analyzing packet headers of the packet traffic via a packet switched network transmission protocol that is applied to the packet traffic during data communications between hardware devices of the internet service provider system.

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